

## MOBILE TERMINAL HAVING WIDE DISPLAY UNIT

### CROSS REFERENCE TO RELATED APPLICATION

**[0001]** This application claims priority from and the benefit of the Korean Application No. 10-2009-0007318, filed on Jan. 30, 2009, which is hereby incorporated by reference for all purposes as if fully set forth herein.

### BACKGROUND OF THE INVENTION

**[0002]** 1. Field of the Invention

**[0003]** Exemplary embodiments of the present invention relates to a mobile terminal, and more particularly, to a mobile terminal capable of extending a display unit.

**[0004]** 2. Description of the Background

**[0005]** A mobile terminal is an electronic device which provides users with convenience of mobility along with rich set of services such as wireless communication, network connection, and digital broadcasting reception regardless of time and location. This convenience spawned is various mobile terminals to develop effectively performing a communication function, Internet connection function, and digital broadcasting reception function. Further, a function such as document writing and a game player can be added to the mobile terminal.

**[0006]** To promote greater adoption, manufacturers of a mobile terminal effort to develop a gradually increasing size of display unit capable of showing the rich set of services of a mobile terminal to enable a user to conveniently perform such functions.

**[0007]** However, a typical display unit of a mobile terminal has a limited display area, thus rendering a visual limitation in order to use a function such as Internet web browsing. However, an approach to overcome such a limitation by increasing a size of the display unit bears a problem such as deteriorating mobility of the mobile terminal.

**[0008]** Therefore, there is a need for an approach for providing a mobile terminal for satisfying both mobility of the mobile terminal and multi-performance requirements using a wide display area without increasing the display unit.

### SUMMARY OF THE INVENTION

**[0009]** These and other needs are addressed by the present invention, in which exemplary embodiments of the present invention provide a mobile terminal that supports a mobility of the mobile terminal as well as capable of providing a wide display unit by positioning a first display unit of a main body adjacent to a second display unit of a folder unit according to a user settings.

**[0010]** Additional features of the invention will be set forth in the description which follows, and in part will be apparent from the description, or may be learned by practice of the invention.

**[0011]** Still other aspects, features, and advantages of the present invention are readily is apparent from the following detailed description, simply by illustrating a number of particular embodiments and implementations, including the best mode contemplated for carrying out the present invention. The present invention is also capable of other and different embodiments, and its several details can be modified in various obvious respects, all without departing from the spirit and

scope of the present invention. Accordingly, the drawing and description are to be regarded as illustrative in nature, and not as restrictive.

**[0012]** Exemplary embodiments of the present invention disclose a mobile terminal that supports a mobility as well as capable of providing a wide display unit by positioning a first display unit of a main body adjacent to a second display unit of a folder unit according to a user settings. The mobile terminal includes a main body having a first display unit. The mobile terminal includes a folder unit having a second display unit provided opposite to the first display unit. The mobile terminal also includes a sliding unit connected to one end of the folder unit to guide slide movement of the folder unit. The mobile terminal includes a hinge coupler to connect the sliding unit and the main body such that the sliding unit rotates based on the main body. The second display unit locates adjacent to the first display unit according to the slide movement of the folder unit toward the main body, the folder unit being opened by the sliding unit rotation based on the hinge coupler. And a wide display unit is formed based on a surface of the first display unit and a surface of the second display unit formed in a single plane.

### BRIEF DESCRIPTION OF THE DRAWINGS

**[0013]** The accompanying drawings, which are included to provide a further understanding of the invention and are incorporated in and constitute a part of this specification, illustrate exemplary embodiments of the invention, and together with the description serve to explain the principles of the invention.

**[0014]** FIG. 1A and FIG. 1B are exemplary perspective views illustrating a mobile terminal, according to exemplary embodiments of the present invention.

**[0015]** FIG. 2A and FIG. 2B are exemplary perspective views illustrating a configuration of a sliding unit of the mobile terminal of FIG. 1A and FIG. 1B.

**[0016]** FIG. 3A is an exemplary perspective view illustrating a configuration of a hinge coupling unit of the mobile terminal of FIG. 1A and FIG. 1B.

**[0017]** FIG. 3B is an exemplary perspective view illustrating a first folder hinge and a second folder hinge in a hinge coupling unit of the mobile terminal of FIG. 1A and FIG. 1B.

**[0018]** FIG. 4A, FIG. 4B and FIG. 4C are exemplary views illustrating a sliding unit of the mobile terminal of FIG. 1A and FIG. 1B rotates by '90,' according to exemplary embodiments of the present invention.

**[0019]** FIG. 5A, FIG. 5B and FIG. 5C are exemplary views illustrating a sliding unit of the mobile terminal rotates by '180°,' according to exemplary embodiments of the present invention.

**[0020]** FIG. 6A and FIG. 6B illustrate exemplary screen output of a first display unit and a second display unit according to a user setting of the mobile terminal of FIG. 1A and FIG. 1B.

### DETAILED DESCRIPTION OF THE ILLUSTRATED EMBODIMENTS

**[0021]** An apparatus, method and software for control of a mobile terminal having wide display unit are described. In the following description, for the purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It is apparent, however, to one skilled in the art that the present invention